

**Polynuclear Aromatic Hydrocarbon
Sample Data Summary Package Cover Sheet**

Client: PACE ANALYTICAL SERVICES, INC.

Project: EA EST, INC.

SDG: 878927

SDG Narrative

Name PACE ANALYTICAL SERVICES, INC.

Client Project Name EA EST, INC.

Client Project# 2064694

Project Coordinator Tod Noltemeyer

SDG 878927

LabSection BNASIM-K

Lab Number	SampleID	Collect Date	Received	Matrix
878927-001	IWST00102-EPA	11/27/06	11/30/06	BIOTA
878927-002	IWST00101-EPA	11/27/06	11/30/06	BIOTA
878927-003	IWSF00301-EPA	11/28/06	11/30/06	BIOTA
878927-004	IWBC00403-EPA	11/28/06	11/30/06	BIOTA



CASE NARRATIVE – PAH ANALYSIS

Lab Report Number (SDG): 878927
Client: PACE ANALYTICAL SERVICES, INC.
Project Name: EA EST, INC.
Project Number: 2064694

1. RECEIPT

The samples were received on ice and kept frozen until time of extraction.

2. HOLDING TIMES

- A. Sample Preparation:** All recommended holding times were met.
- B. Sample Analysis:** All recommended holding times were met.

3. METHOD

Preparation: SW-846 3540C
Analysis: SW-846 8270C Selective Ion Monitoring

4. PREPARATION

Sample preparation proceeded normally. All samples and associated batch QC samples were taken through Gel Permeation Chromatography (GPC) and silica gel clean up procedures to reduce interference from non-target analytes.

5. ANALYSIS

- A. Calibration:**
 - 1. GC/MS Tune:** All method acceptance criteria were met.
 - 2. Initial verification:** All method acceptance criteria were met.
 - 3. Continuing verification:** All method acceptance criteria were met.
- B. Blanks:**
 - 1. Method:** The in-house acceptance criteria were met for method blank SVG2052-062SIMMB.
- C. Surrogates:** All in-house acceptance criteria were met.
- D. Spikes:**
 - 1. Lab Control Spike (LCS):** All in-house accuracy criteria were met for SVG2052-062SIMLCS.
 - 2. Matrix Spike/Matrix Spike Duplicate (MS/MSD):** Sample IWSF00301-EPA was designated as the parent sample for the MS/MSD for this SDG. All in-house accuracy and precision criteria were met.
- E. Internal Standards:** All in-house acceptance criteria were met for all reported analyses.
- F. Samples:** Sample analyses proceeded normally.
- G. Dilutions:** None required for this SDG.
- H. Reanalysis:** None required for this SDG.
- I. Comments:** Due to rounding differences in the software programs used, the values found on the quantitation reports may not match the values found on the sample Form 1s.

I certify that this data package is in compliance, with the terms and conditions agreed to by **Pace Analytical Services, Inc.** and by the client, both technically and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this hard copy data package and in the computer-readable data submitted on diskette:

Signed: Leigh Anderson Date: 01/03/07
Name: Leigh Anderson Position: Quality Assurance Auditor

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Inorganic	Sample received unpreserved. Sample was either preserved at the time of receipt or at the time of sample preparation.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the check standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWS00102-EPA

Matrix Type : BIOTA

Collection Date : 11/27/06

Report Date : 01/03/07

Lab Sample Number : 878927-001

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Percent Lipids	3.86	---	---	1	%		12/12/06	Pace Lipid	Pace Lipid

SEMIVOLATILES - SPECIAL LIST - SIM

Prep Date: 12/10/06

Analyte	Result	MDL	EQL	Dil.	Units	Code	Anal Date	Prep Method	Anl Method
1-Methylnaphthalene	1.3	0.21	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
2-Methylnaphthalene	3.4	0.22	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Acenaphthene	2.3	0.33	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Acenaphthylene	0.65	U 0.65	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Anthracene	0.61	U 0.61	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(a)anthracene	0.75	U 0.75	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(a)pyrene	0.84	U 0.84	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(b)fluoranthene	0.68	U 0.68	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(ghi)perylene	0.66	U 0.66	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(k)fluoranthene	0.54	U 0.54	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Chrysene	0.62	U 0.62	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Dibenz(a,h)anthracene	0.63	U 0.63	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Fluoranthene	0.60	U 0.60	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Fluorene	0.97	0.38	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Indeno(1,2,3-cd)pyrene	0.63	U 0.63	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Naphthalene	1.9	0.25	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Phenanthrene	1.0	0.56	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Pyrene	0.67	U 0.67	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Surrogate		LCL	UCL						
Nitrobenzene-d5	41	10	103	1	%		12/14/06	SW846 3540C	8270C-SIM
2-Fluorobiphenyl	74	26	96	1	%		12/14/06	SW846 3540C	8270C-SIM
Terphenyl-d14	73	33	99	1	%		12/14/06	SW846 3540C	8270C-SIM

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWST00101-EPA

Matrix Type : BIOTA

Collection Date : 11/27/06

Report Date : 01/03/07

Lab Sample Number : 878927-002

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Percent Lipids	1.12	---	---	1	%		12/12/06	Pace Lipid	Pace Lipid

SEMIVOLATILES - SPECIAL LIST - SIM

Prep Date: 12/10/06

Analyte	Result	MDL	EQL	Dil.	Units	Code	Anal Date	Prep Method	Anl Method
1-Methylnaphthalene	0.76	J 0.21	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
2-Methylnaphthalene	1.7	0.22	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Acenaphthene	0.33	U 0.33	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Acenaphthylene	0.65	U 0.65	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Anthracene	0.61	U 0.61	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(a)anthracene	0.75	U 0.75	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(a)pyrene	0.84	U 0.84	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(b)fluoranthene	0.68	U 0.68	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(ghi)perylene	0.66	U 0.66	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(k)fluoranthene	0.54	U 0.54	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Chrysene	0.62	U 0.62	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Dibenz(a,h)anthracene	0.63	U 0.63	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Fluoranthene	0.60	U 0.60	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Fluorene	0.38	U 0.38	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Indeno(1,2,3-cd)pyrene	0.63	U 0.63	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Naphthalene	1.5	0.25	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Phenanthrene	0.56	U 0.56	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Pyrene	0.67	U 0.67	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Surrogate		LCL	UCL						
Nitrobenzene-d5	40	10	103	1	%		12/14/06	SW846 3540C	8270C-SIM
2-Fluorobiphenyl	71	26	96	1	%		12/14/06	SW846 3540C	8270C-SIM
Terphenyl-d14	78	33	99	1	%		12/14/06	SW846 3540C	8270C-SIM

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWSF00301-EPA

Matrix Type : BIOTA

Collection Date : 11/28/06

Report Date : 01/03/07

Lab Sample Number : 878927-003

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Percent Lipids	0.19	---	---	1	%		12/12/06	Pace Lipid	Pace Lipid

SEMIVOLATILES - SPECIAL LIST - SIM

Prep Date: 12/10/06

Analyte	Result	MDL	EQL	Dil.	Units	Code	Anal Date	Prep Method	Anl Method
1-Methylnaphthalene	0.21	U 0.21	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
2-Methylnaphthalene	0.25	J 0.22	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Acenaphthene	0.33	U 0.33	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Acenaphthylene	0.65	U 0.65	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Anthracene	0.61	U 0.61	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(a)anthracene	0.75	U 0.75	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(a)pyrene	0.84	U 0.84	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(b)fluoranthene	0.68	U 0.68	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(ghi)perylene	0.66	U 0.66	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(k)fluoranthene	0.54	U 0.54	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Chrysene	0.62	U 0.62	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Dibenz(a,h)anthracene	0.63	U 0.63	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Fluoranthene	0.60	U 0.60	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Fluorene	0.38	U 0.38	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Indeno(1,2,3-cd)pyrene	0.63	U 0.63	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Naphthalene	0.39	J 0.25	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Phenanthrene	0.56	J 0.56	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Pyrene	0.67	U 0.67	0.83	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM

Surrogate

LCL UCL

Nitrobenzene-d5	18	10	103	1	%		12/14/06	SW846 3540C	8270C-SIM
2-Fluorobiphenyl	40	26	96	1	%		12/14/06	SW846 3540C	8270C-SIM
Terphenyl-d14	38	33	99	1	%		12/14/06	SW846 3540C	8270C-SIM

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWBC00403-EPA

Matrix Type : BIOTA

Collection Date : 11/28/06

Report Date : 01/03/07

Lab Sample Number : 878927-004

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Percent Lipids	0.57	---	---	1	%		12/12/06	Pace Lipid	Pace Lipid

SEMIVOLATILES - SPECIAL LIST - SIM

Prep Date: 12/10/06

Analyte	Result	MDL	EQL	Dil.	Units	Code	Anal Date	Prep Method	Anl Method
1-Methylnaphthalene	0.42	U 0.42	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
2-Methylnaphthalene	1.5	J 0.44	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Acenaphthene	0.67	U 0.67	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Acenaphthylene	1.3	U 1.3	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Anthracene	1.2	U 1.2	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(a)anthracene	1.5	U 1.5	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(a)pyrene	1.7	U 1.7	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(b)fluoranthene	1.4	U 1.4	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(ghi)perylene	1.3	U 1.3	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Benzo(k)fluoranthene	1.1	U 1.1	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Chrysene	1.2	U 1.2	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Dibenz(a,h)anthracene	1.3	U 1.3	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Fluoranthene	1.2	U 1.2	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Fluorene	0.76	U 0.76	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Indeno(1,2,3-cd)pyrene	1.3	U 1.3	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Naphthalene	1.5	J 0.50	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Phenanthrene	1.1	U 1.1	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Pyrene	1.3	U 1.3	1.7	1	ug/Kg wet		12/14/06	SW846 3540C	8270C-SIM
Surrogate		LCL	UCL						
Nitrobenzene-d5	32	10	103	1	%		12/14/06	SW846 3540C	8270C-SIM
2-Fluorobiphenyl	65	26	96	1	%		12/14/06	SW846 3540C	8270C-SIM
Terphenyl-d14	63	33	99	1	%		12/14/06	SW846 3540C	8270C-SIM

Pesticide Sample Data Summary Package Cover Sheet

Client: PACE ANALYTICAL SERVICES, INC.
Project: EA EST, INC.
SDG: 878927

SDG Narrative

Name PACE ANALYTICAL SERVICES, INC.

Client Project Name EA EST, INC.

Client Project# 2064694

Project Coordinator Tod Noltemeyer

SDG 878927

LabSection PEST-K

Lab Number	SampleID	Collect Date	Received	Matrix
878927-001	IWST00102-EPA	11/27/06	11/30/06	BIOTA
878927-002	IWST00101-EPA	11/27/06	11/30/06	BIOTA
878927-003	IWSF00301-EPA	11/28/06	11/30/06	BIOTA
878927-004	IWBC00403-EPA	11/28/06	11/30/06	BIOTA



CASE NARRATIVE - PESTICIDE ANALYSIS

Lab Report Number (SDG): 878927

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: EA EST, INC.

Project Number: 2064694

1. RECEIPT

Samples were received on ice and kept frozen until time of extraction.

2. HOLDING TIMES

- A. **Sample Preparation:** All method specified holding times were met.
- B. **Sample Analysis:** All method specified holding times were met.

3. METHOD

Preparation: SW-846 3540C

Analysis: SW-846 8081A

4. PREPARATION

Sample preparation proceeded normally. All samples and associated batch QC samples were taken through Gel Permeation Chromatography (GPC) and florisil cartridge clean up procedures to reduce interference from non-target analytes.

5. ANALYSIS

- A. **Calibration:**
 - 1. **Initial verification:** All method acceptance criteria were met for both the quantitation and confirmation columns.
 - 2. **Continuing verification:** All method acceptance criteria were met. In the case where a particular compound was not within the 15%D criteria, corrective action was not taken because the average of all compounds was less than 15%.
 - 3. **Performance Evaluation Mixtures (PEMs):** All method acceptance criteria were met.
- B. **Blanks:**
 - 1. **Method:** The in-house acceptance criteria were met for method blank SVG2052-059PESTMb.
- C. **Surrogates:** All in-house acceptance criteria were met.
- D. **Spikes:**
 - 1. **Lab Control Spike (LCS):** All in-house accuracy criteria were met for SVG2052-059PESTLCS.
 - 2. **Matrix Spike / Matrix Spike Duplicate (MS/MSD):** Sample IWS00101-EPA was designated as the parent sample for the MS/MSD of this SDG. All in-house accuracy criteria were met with the exception of 4,4'-DDE, Aldrin, alpha-BHC, delta-BHC, and Endosulfan Sulfate in the MS, and alpha-BHC, delta-BHC, Endosulfan Sulfate, and gamma-BHC (Lindane) in the MSD. The parent sample was given the "N" data qualifier. All in-house precision criteria were met with the exception of 4,4'-DDD, 4,4'-DDT, alpha-BHC, Endrin Aldehyde, Endrin Ketone, and gamma-BHC (Lindane). The parent sample was given the "*" data qualifier.
- E. **Samples:** Sample analyses proceeded normally. RTX-CLP is the quantitation column. RTX-CLP2 is the confirmation column.
- F. **Dilutions:** None required for this SDG.
- G. **Reanalysis:** None required for this SDG.



H. **Comments:** Due to rounding differences in the software programs used, the values found on the quantitation reports may not match the values found on the sample Form 1s.

In instances where the percent difference was greater than 40% and a known interference was present the lower of the two values was reported and the "P" data qualifier was given.

In instances where PA is noted on the quantitation report the peak has been manually assigned.

I certify that this data package is in compliance, with the terms and conditions agreed to by **Pace Analytical Services, Inc.** and by the client, both technically and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this hard copy data package and in the computer-readable data:

Signed: Leigh Anderson Date: 01/03/07
Name: Leigh Anderson Position: Quality Assurance Auditor

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Inorganic	Sample received unpreserved. Sample was either preserved at the time of receipt or at the time of sample preparation.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the check standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWST00102-EPA

Matrix Type : BIOTA

Collection Date : 11/27/06

Report Date : 01/03/07

Lab Sample Number : 878927-001

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Percent Solids	24.5	---	---	1	% wet		12/28/06	SM 2540G M	SM 2540G M

PESTICIDES - ORGANOCHLORINE SPECIAL LIST

Prep Date: 12/10/06

Analyte	Result	MDL	EQL	Dil.	Units	Code	Anal Date	Prep Method	Anl Method
4,4'-DDD	1.5	U 1.5	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
4,4'-DDE	12	2.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
4,4'-DDT	1.8	U 1.8	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Aldrin	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
alpha-BHC	1.3	U 1.3	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
alpha-Chlordane	0.97	U 0.97	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
beta-BHC	1.9	U 1.9	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
delta-BHC	0.91	U 0.91	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Dieldrin	1.7	U 1.7	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan I	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan II	1.5	U 1.5	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan Sulfate	2.0	U 2.0	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin	2.1	U 2.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin Aldehyde	1.2	U 1.2	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin Ketone	3.1	U 3.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
gamma-BHC (Lindane)	0.72	U 0.72	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
gamma-Chlordane	1.6	U 1.6	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Heptachlor	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Heptachlor Epoxide	1.3	U 1.3	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Hexachlorobenzene	2.7	2.2	2.5	1	ug/kg wet	P	12/20/06	SW846 3540C	SW846 8081A
Methoxychlor	8.0	U 8.0	25	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Toxaphene	64	U 64	150	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Surrogate		LCL	UCL						
Tetrachloro-m-xylene	79	40	136	1	%		12/20/06	SW846 3540C	SW846 8081A
Decachlorobiphenyl	70	47	145	1	%		12/20/06	SW846 3540C	SW846 8081A

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWST00101-EPA

Matrix Type : BIOTA

Collection Date : 11/27/06

Report Date : 01/03/07

Lab Sample Number : 878927-002

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Percent Solids	23.0	---	---	1	% wet		12/28/06	SM 2540G M	SM 2540G M

PESTICIDES - ORGANOCHLORINE SPECIAL LIST

Prep Date: 12/10/06

Analyte	Result	MDL	EQL	Dil.	Units	Code	Anal Date	Prep Method	Anl Method
4,4'-DDD	1.5	U 1.5	5.0	1	ug/kg wet	*	12/20/06	SW846 3540C	SW846 8081A
4,4'-DDE	33	2.1	5.0	1	ug/kg wet	N	12/20/06	SW846 3540C	SW846 8081A
4,4'-DDT	1.8	U 1.8	5.0	1	ug/kg wet	*	12/20/06	SW846 3540C	SW846 8081A
Aldrin	1.0	U 1.0	2.5	1	ug/kg wet	N	12/20/06	SW846 3540C	SW846 8081A
alpha-BHC	1.3	U 1.3	2.5	1	ug/kg wet	N*	12/20/06	SW846 3540C	SW846 8081A
alpha-Chlordane	0.97	U 0.97	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
beta-BHC	1.9	U 1.9	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
delta-BHC	0.91	U 0.91	2.5	1	ug/kg wet	N	12/20/06	SW846 3540C	SW846 8081A
Dieldrin	1.7	U 1.7	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan I	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan II	1.5	U 1.5	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan Sulfate	2.0	U 2.0	5.0	1	ug/kg wet	N*	12/20/06	SW846 3540C	SW846 8081A
Endrin	2.1	U 2.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin Aldehyde	1.2	U 1.2	5.0	1	ug/kg wet	*	12/20/06	SW846 3540C	SW846 8081A
Endrin Ketone	3.1	U 3.1	5.0	1	ug/kg wet	*	12/20/06	SW846 3540C	SW846 8081A
gamma-BHC (Lindane)	0.72	U 0.72	2.5	1	ug/kg wet	N*	12/20/06	SW846 3540C	SW846 8081A
gamma-Chlordane	1.6	U 1.6	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Heptachlor	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Heptachlor Epoxide	1.3	U 1.3	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Hexachlorobenzene	2.2	U 2.2	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Methoxychlor	8.0	U 8.0	25	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Toxaphene	64	U 64	150	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Surrogate		LCL	UCL						
Tetrachloro-m-xylene	63	40	136	1	%		12/20/06	SW846 3540C	SW846 8081A
Decachlorobiphenyl	64	47	145	1	%		12/20/06	SW846 3540C	SW846 8081A

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWSF00301-EPA

Matrix Type : BIOTA

Collection Date : 11/28/06

Report Date : 01/03/07

Lab Sample Number : 878927-003

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Percent Solids	21.8	---	---	1	% wet		12/28/06	SM 2540G M	SM 2540G M

PESTICIDES - ORGANOCHLORINE SPECIAL LIST

Prep Date: 12/10/06

Analyte	Result	MDL	EQL	Dil.	Units	Code	Anal Date	Prep Method	Anl Method
4,4'-DDD	1.5	U 1.5	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
4,4'-DDE	2.1	U 2.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
4,4'-DDT	1.8	U 1.8	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Aldrin	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
alpha-BHC	1.3	U 1.3	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
alpha-Chlordane	0.97	U 0.97	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
beta-BHC	1.9	U 1.9	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
delta-BHC	0.91	U 0.91	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Dieldrin	1.7	U 1.7	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan I	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan II	1.5	U 1.5	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan Sulfate	2.0	U 2.0	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin	2.1	U 2.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin Aldehyde	1.2	U 1.2	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin Ketone	3.1	U 3.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
gamma-BHC (Lindane)	0.72	U 0.72	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
gamma-Chlordane	1.6	U 1.6	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Heptachlor	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Heptachlor Epoxide	1.3	U 1.3	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Hexachlorobenzene	2.2	U 2.2	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Methoxychlor	8.0	U 8.0	25	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Toxaphene	64	U 64	150	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Surrogate		LCL	UCL						
Tetrachloro-m-xylene	81	40	136	1	%		12/20/06	SW846 3540C	SW846 8081A
Decachlorobiphenyl	69	47	145	1	%		12/20/06	SW846 3540C	SW846 8081A

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWBC00403-EPA

Matrix Type : BIOTA

Collection Date : 11/28/06

Report Date : 01/03/07

Lab Sample Number : 878927-004

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Percent Solids	20.8	---	---	1	% wet		12/28/06	SM 2540G M	SM 2540G M

PESTICIDES - ORGANOCHLORINE SPECIAL LIST

Prep Date: 12/10/06

Analyte	Result	MDL	EQL	Dil.	Units	Code	Anal Date	Prep Method	Anl Method
4,4'-DDD	1.5	U 1.5	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
4,4'-DDE	2.3	J 2.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
4,4'-DDT	1.8	U 1.8	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Aldrin	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
alpha-BHC	1.3	U 1.3	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
alpha-Chlordane	0.97	U 0.97	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
beta-BHC	1.9	U 1.9	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
delta-BHC	0.91	U 0.91	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Dieldrin	1.7	U 1.7	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan I	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan II	1.5	U 1.5	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endosulfan Sulfate	2.0	U 2.0	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin	2.1	U 2.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin Aldehyde	1.2	U 1.2	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Endrin Ketone	3.1	U 3.1	5.0	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
gamma-BHC (Lindane)	0.72	U 0.72	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
gamma-Chlordane	1.6	U 1.6	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Heptachlor	1.0	U 1.0	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Heptachlor Epoxide	1.3	U 1.3	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Hexachlorobenzene	2.2	U 2.2	2.5	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Methoxychlor	8.0	U 8.0	25	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Toxaphene	64	U 64	150	1	ug/kg wet		12/20/06	SW846 3540C	SW846 8081A
Surrogate		LCL	UCL						
Tetrachloro-m-xylene	82	40	136	1	%		12/20/06	SW846 3540C	SW846 8081A
Decachlorobiphenyl	70	47	145	1	%		12/20/06	SW846 3540C	SW846 8081A

Metals Result Summary Cover Sheet

Client: PACE ANALYTICAL SERVICES, INC.

Project: EA EST, INC.

SDG: 878927

SDG Narrative

Name PACE ANALYTICAL SERVICES, INC.

Client Project Name EA EST, INC.

Client Project# 2064694

Project Coordinator Tod Noltemeyer

SDG 878927

LabSection METALS-K

Lab Number	SampleID	Collect Date	Received	Matrix
878927-001	IWST00102-EPA	11/27/06	11/30/06	BIOTA
878927-002	IWST00101-EPA	11/27/06	11/30/06	BIOTA
878927-003	IWSF00301-EPA	11/28/06	11/30/06	BIOTA
878927-004	IWBC00403-EPA	11/28/06	11/30/06	BIOTA



CASE NARRATIVE - METALS ANALYSIS

Lab Report Number (SDG): 878927

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: EA EST, INC.

Project Number: 2064694

1. RECEIPT

The samples were received in good condition.

2. HOLDING TIMES

- A. **Sample Preparation:** All recommended holding times were met.
- B. **Sample Analysis:** All recommended holding times were met.

3. METHOD

- A. **Preparation:** SW846 M3050B, 3050B sec 7.5, M7471A
- B. **Analysis:** SW846 6020, M7471A

4. PREPARATION

Sample preparation proceeded normally.

5. ANALYSIS

- A. **Calibration:**
 - 1. **Initial verification:** All method acceptance criteria were met.
 - 2. **Continuing verification:** All method acceptance criteria were met.
- B. **Blanks:**
 - 1. **Initial calibration:** All in-house acceptance criteria were met.
 - 2. **Continuing calibration:** All in-house acceptance criteria were met.
 - 3. **Method:** All method and in-house acceptance criteria were met for the method blanks. Aluminum, Potassium and Silver were detected at a concentration between the Method Detection Limit (MDL) and Estimated Quantitation Limit (EQL). Aluminum, Potassium and Silver results greater than the MDL but less than twenty times the blank value were reported with the "A" data qualifier. Boron was detected in the method blank at a negative level greater than the MDL, but less than the EQL. Boron results less than twenty times the absolute value in the blank were reported with an "A" data qualifier.
 - 4. **Catfish:** A Catfish Blank is prepared and analyzed with each sample batch to determine the background contamination levels of the Catfish used for the laboratory control spike (LCS). Calcium, Copper, Iron, Magnesium, Mercury, Potassium, Sodium, Titanium and Zinc were detected above the MDL. No corrective action was required since this blank is only used to calculate the recoveries of the Lab Control Standard that matrix match the samples.
- C. **Spikes:**
 - 1. **Lab Control Spike (LCS):** All in-house accuracy criteria were met for the LCS.
 - 2. **SRM:** A Standard Reference Material is analyzed with each tissue sample batch. The default accuracy criterion is 80%-120% for ICP-MS metals. The SRM recovery of Chromium, Iron, Selenium and Vanadium were outside the default criteria. No corrective action was taken as these control limits are advisory. All other recoveries met the default accuracy criteria.
 - 3. **Matrix Spike / Duplicate (MS/MSD):** Sample IWS00102-EPA was designated MS/MSD for this SDG. All in-house accuracy and precision criteria were met with the following exceptions. The recoveries of Selenium were above accuracy criteria in the MS and MSD. The parent sample result for Potassium was greater than four times the spike amount. Therefore, the accuracy criteria do not apply to this analyte.



- D. **Sample Duplicates:** None required for this SDG.
- E. **Internal Standards:** All in-house acceptance criteria were met for the internal standard used for quantification.
- F. **ICP-MS Interference Check Samples:** All method acceptance criteria were met.
- G. **ICP-MS Post Spike:** All method acceptance criteria were met.
- H. **ICP-MS Serial Dilution:** All method acceptance criteria were met.
- I. **Samples:** Sample analyses proceeded normally.
- J. **Sample Dilutions:** All samples were diluted to bring the Potassium values within the range of the instrument.
- K. **Reanalysis:** Not applicable.
- L. **Comments:**

I certify that this data package is in compliance with the terms and conditions agreed to by **Pace Analytical Services, Inc.** and by the client, both technically and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this hard copy data package and in the computer-readable data submitted on diskette:

Signed: Jill Duranceau Date: 1/04/07
Name: Jill Duranceau Position: Quality Assurance Auditor

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Inorganic	Sample received unpreserved. Sample was either preserved at the time of receipt or at the time of sample preparation.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the check standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level; therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWS00102-EPA

Matrix Type : BIOTA

Collection Date : 11/27/06

Report Date : 01/04/07

Lab Sample Number : 878927-001

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Aluminum	0.98	B 0.72	5.0	1	mg/Kg wet	A	12/14/06	SW846 M3050	SW846 6020
Antimony	0.040	U 0.040	0.10	1	mg/Kg wet		12/19/06	3050B Sec7.5	SW846 6020
Arsenic	0.22	0.036	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Barium	0.070	U 0.070	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Beryllium	0.015	U 0.015	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Boron	0.087	U 0.087	1.0	1	mg/Kg wet	A	12/13/06	SW846 M3050	SW846 6020
Cadmium	0.027	B 0.010	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Calcium	280	13	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Chromium	0.12	0.088	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Cobalt	0.034	U 0.034	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Copper	0.26	0.11	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Iron	4.1	B 1.1	5.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Lead	0.035	U 0.035	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Magnesium	330	1.1	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Manganese	0.29	U 0.29	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Mercury	0.073	0.0011	0.010	1	mg/Kg wet		12/14/06	SW846 M7471	SW846 M7471
Nickel	0.040	B 0.036	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Potassium	4200	68	1000	20	mg/Kg wet		12/13/06	SW846 M3050	SW846 6020
Selenium	0.75	0.11	0.10	1	mg/Kg wet	N	12/14/06	SW846 M3050	SW846 6020
Silver	0.0082	U 0.0082	0.050	1	mg/Kg wet		12/19/06	3050B Sec7.5	SW846 6020
Sodium	390	16	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Thallium	0.017	U 0.017	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Titanium	1.3	0.093	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Vanadium	0.14	0.091	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Zinc	8.3	0.37	1.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWST00101-EPA

Matrix Type : BIOTA

Collection Date : 11/27/06

Report Date : 01/04/07

Lab Sample Number : 878927-002

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Aluminum	0.72	U 0.72	5.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Antimony	0.040	U 0.040	0.10	1	mg/Kg wet		12/19/06	3050B Sec7.5	SW846 6020
Arsenic	0.48	0.036	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Barium	0.070	U 0.070	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Beryllium	0.015	U 0.015	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Boron	0.21	B 0.087	1.0	1	mg/Kg wet	A	12/13/06	SW846 M3050	SW846 6020
Cadmium	0.010	U 0.010	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Calcium	120	13	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Chromium	0.088	U 0.088	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Cobalt	0.034	U 0.034	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Copper	0.35	0.11	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Iron	3.9	B 1.1	5.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Lead	0.035	U 0.035	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Magnesium	240	1.1	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Manganese	0.29	U 0.29	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Mercury	0.063	0.0011	0.010	1	mg/Kg wet		12/14/06	SW846 M7471	SW846 M7471
Nickel	0.036	U 0.036	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Potassium	3700	68	1000	20	mg/Kg wet		12/13/06	SW846 M3050	SW846 6020
Selenium	0.48	0.11	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Silver	0.0082	U 0.0082	0.050	1	mg/Kg wet		12/19/06	3050B Sec7.5	SW846 6020
Sodium	620	16	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Thallium	0.017	U 0.017	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Titanium	1.0	0.093	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Vanadium	0.12	0.091	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Zinc	9.9	0.37	1.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWSF00301-EPA

Matrix Type : BIOTA

Collection Date : 11/28/06

Report Date : 01/04/07

Lab Sample Number : 878927-003

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Aluminum	0.72	U 0.72	5.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Antimony	0.040	U 0.040	0.10	1	mg/Kg wet		12/19/06	3050B Sec7.5	SW846 6020
Arsenic	1.2	0.036	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Barium	0.070	U 0.070	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Beryllium	0.015	U 0.015	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Boron	0.087	U 0.087	1.0	1	mg/Kg wet	A	12/13/06	SW846 M3050	SW846 6020
Cadmium	0.010	U 0.010	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Calcium	120	13	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Chromium	0.088	U 0.088	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Cobalt	0.034	U 0.034	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Copper	0.17	0.11	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Iron	2.1	B 1.1	5.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Lead	0.035	U 0.035	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Magnesium	260	1.1	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Manganese	0.29	U 0.29	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Mercury	0.042	0.0011	0.010	1	mg/Kg wet		12/14/06	SW846 M7471	SW846 M7471
Nickel	0.063	B 0.036	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Potassium	4000	68	1000	20	mg/Kg wet		12/13/06	SW846 M3050	SW846 6020
Selenium	0.54	0.11	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Silver	0.0082	U 0.0082	0.050	1	mg/Kg wet		12/19/06	3050B Sec7.5	SW846 6020
Sodium	410	16	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Thallium	0.017	U 0.017	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Titanium	1.1	0.093	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Vanadium	0.091	B 0.091	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Zinc	9.0	0.37	1.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020

**Pace Analytical
Services, Inc.**

Analytical Report Number: 878927

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : EA EST, INC.

Project Number : 2064694

Field ID : IWBC00403-EPA

Matrix Type : BIOTA

Collection Date : 11/28/06

Report Date : 01/02/07

Lab Sample Number : 878927-004

INORGANICS

Test	Result	MDL	EQL	Dil.	Units	Code	Anl Date	Prep Method	Anl Method
Aluminum	1.3	B 0.72	5.0	1	mg/Kg wet	A	12/14/06	SW846 M3050	SW846 6020
Antimony	0.040	U 0.040	0.10	1	mg/Kg wet		12/20/06	3050B Sec7.5	SW846 6020
Arsenic	2.6	0.036	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Barium	4.2	0.070	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Beryllium	0.015	U 0.015	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Boron	0.96	B 0.087	1.0	1	mg/Kg wet	A	12/13/06	SW846 M3050	SW846 6020
Cadmium	0.010	U 0.010	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Calcium	2400	13	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Chromium	0.088	U 0.088	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Cobalt	0.034	U 0.034	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Copper	6.0	0.11	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Iron	11	1.1	5.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Lead	0.035	U 0.035	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Magnesium	440	1.1	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Manganese	8.8	0.29	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Mercury	0.11	0.0011	0.010	1	mg/Kg wet		12/14/06	SW846 M7471	SW846 M7471
Nickel	0.054	B 0.036	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Potassium	3700	68	1000	20	mg/Kg wet		12/13/06	SW846 M3050	SW846 6020
Selenium	0.81	0.11	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Silver	0.023	B 0.0082	0.050	1	mg/Kg wet	A	12/20/06	3050B Sec7.5	SW846 6020
Sodium	2400	16	50	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Thallium	0.017	U 0.017	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Titanium	1.8	0.093	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Vanadium	0.091	U 0.091	0.10	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020
Zinc	52	0.37	1.0	1	mg/Kg wet		12/14/06	SW846 M3050	SW846 6020